**This is a demonstrations of self-driven autonomous car.**

**Many such other projects do exist on Autonomous car:**

I was inspired after seeing ‘ Zheng Wang’ model and selected the project to recreate it with my own knowledge and skills.

**Self-Driven Car**

This project will produce a driverless car or an autonomous car (self-Driven). The car is capable to sense the surrounding and will pave path by its own with little or no human input.

1**.The project is build using Raspberry Pi(model B+), Arduino .In this project Raspberry Pi will be collecting data set**

**2.Data from Raspberry Pi camera Module.**

* Camera model used: Electrobot EB\_Rpb-cam8 Raspberry Pi Camera Board Module v2-8 Megapixel.

**3.Ultrasonic Sensor**

**4.Arduino**

**5.Open CV neural network**

**6.RC car (for implementation)**

Camera module and Ultrasonic sensor both will be sending the data to the computer wirelessly. The computer processes input images and sensor data for object detection and avoids collision respectively. A neural network model runs on computer and makes predictions for steering the car on the basis of data collected from camera and ultrasonic sensors. And then those predictions are being sent to the Arduino for Rc car control.

**This project will benefit mass in ways such as;**

1. Reduction in Cost
2. Increased Safety
3. Increased Mobility
4. Customer Satisfaction
5. Reduced Crime

Number of traffic collisions will reduce, which in turn will reduce injuries related costs and costs for car insurance. It will also help in reducing traffic especially in metro cities.

It will provide assistance to handicapped and person with functional limbs, youth, children’s, elderly peoples. Best on emergency cases with no drivers present on the scene.